

November 9

3-5 Multiplying Integers

$$(-6)(2) = -3(9)$$

multiplying

the parenthesis is directly next to an integer

$-3 + (-9)$ the operation is between the integers

$$(-6)(2) = -12$$

$$(3)(-9) = -27$$

$$-2(-2) = 4$$

$$4(2) = 8$$

++	=	+
--	=	+
-+	=	-
+ -	=	-

$$(-2)^2 = -2 \cdot -2 = 4$$

$$(-2)^3 = -2 \cdot -2 \cdot 2 = -8$$

$$(-2)^4 = -2 \cdot -2 \cdot -2 \cdot -2 = 16$$

$$(-2)^5 = -2 \cdot -2 \cdot -2 \cdot -2 \cdot -2 = -32$$

If you have an even number of negative integers, you are multiplying, the product will be positive.

If you have an odd number of negative integers you are multiplying, the product will be negative.

$$(-1)(-1)(-1)(-1)(-2) = -2$$

$$-2(4x)$$

$$(-2 \cdot 4)x$$

$$\boxed{-8x}$$

Simplify

associative property of multiplication

$$(5y)3$$

$$(5 \cdot 3)y$$

$$= 15y$$

commutative property of multiplication

$$(-2)(3) = -6$$

$$(-3)(2) = -6$$

$$(-2)(-3) = 6$$

$$(-3)(-2) = 6$$

+	+	+
+	-	-
-	+	-
-	-	+

$$(-2) \cdot (-2) \cdot (-2) = -8$$

$$(-2) \cdot (-2) \cdot (-2) \cdot (-2) = 16$$

$$(-2) \cdot (-2) \cdot (-2) \cdot (-2) \cdot (-2) = -32$$

$$(-2) \cdot (-2) \cdot (-2) \cdot (-2) \cdot (-2) \cdot (-2) = 64$$

If you have an even number of

negative integers, you are multiplying

the product will be positive.

If you have an odd number of

negative integers, you are multiplying

the product will be negative.

$$(-2) \cdot (-2) \cdot (-2) \cdot (-2) \cdot (-2) \cdot (-2) \cdot (-2) = -128$$